

Report to Congressional Requesters.

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October 18, 1995

The Honorable Herbert H. Bateman Chairman The Honorable Norman Sisisky Ranking Minority Member Subcommittee on Military Readiness Committee on National Security

The Honorable James V. Hansen House of Representatives

This report discusses the effect of training, equipment, and other factors related to the capability of U.S. military forces to conduct peace operations and retrain for combat. We prepared the report at the request of the former Chairman and Ranking Minority Member of the Subcommittee on Oversight and Investigations, House Committee on Armed Services. The information in this report should be useful to your Subcommittee in its deliberations on the impact of peace operations on the military.

We are sending copies of this report to other interested congressional committees; the Secretaries of Defense, the Army, the Navy and the Air Force; the Commandant, U.S. Marine Corps; and the Director, Office of Management and Budget. Copies will also be made available to others on request.

If you or others have any questions on this report, please call me on (202) 512-3504. Major contributors to this report are listed in appendix II.

Richard Davis

Director, National Security

Richard Davis

**Analysis** 

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#### **Purpose**

Since the end of the Cold War, the U.S. military has become increasingly involved in peace operations. As requested by the former Chairman and Ranking Minority Member of the Subcommittee on Oversight and Investigations, House Committee on Armed Services, GAO examined (1) how the services incorporate peace operations into their various training programs, (2) what effect peace operations have on maintaining combat readiness, and (3) whether the services have the weapon systems and equipment they need for these operations. GAO did not assess whether the United States should participate in peace operations.

#### Background

According to the President's February 1995 National Security Strategy, the primary mission of U.S. military forces is to deter and, if necessary, fight and win conflicts in which the most important interests of the United States are threatened. The National Security Strategy and other defense planning documents also require U.S. forces to be capable of performing other missions such as peace operations. While skills required for peace operations overlap with those required for war, there is increasing recognition within the Department of Defense (DOD) that some special peace operations training is needed to successfully conduct these missions. The May 1995 Report of the Commission on Roles and Missions, for example, states that peace operations are integral to the roles of all services and that these operations warrant appropriate training and equipping.

#### Results in Brief

Commanders of ground combat units differ on when special peace operations training should be provided. Some commanders include aspects of peace operations in standard unit training. Other commanders prefer to maintain an exclusive combat focus until their units are formally assigned to a peace operation. In this case, the amount of notification before deployment to a peace operation becomes an important factor. Aviation, naval, support, and special operations forces perform similar tasks in peace operations and in war and therefore do not need as much special training.

Participation in peace operations can provide excellent experience for combat operations, but such participation can also degrade a unit's

<sup>&</sup>lt;sup>1</sup>For the purpose of this report, peace operations include everything from low-intensity peacekeeping operations, such as military observer duty, to high-intensity peace-enforcement operations. In addition to peace operations, DOD continues to participate in humanitarian and disaster relief operations, as it has done for many years. A broader term, "operations other than war," encompasses all of the above activities.

war-fighting capability. The extent of degradation depends on a number of factors, such as the type of peace operation, the type of unit participating, the length of participation, and the opportunities available for training in theater. It can take up to 6 months for a ground combat unit to recover from a peace operation and become combat ready. The recovery period for aviation units is relatively short compared with that for ground forces. Participation in peace operations may interrupt naval training schedules, but there is little difference in the naval skills required for peace operations and for other operations.

Determining whether the services have the appropriate weapon systems and equipment for peace operations is an ongoing process taking place primarily at the service level. The services have identified specific requirements in three areas: (1) force protection, (2) equipment for military operations in built-up areas, and (3) nonlethal weapons. Except for the recent withdrawal operation from Somalia, few nonlethal weapons have been used to date in peace operations.

#### **Principal Findings**

Commanders Differ About When to Provide Peace Operations Training to Ground Combat Forces Since the end of Operation Desert Storm, DOD has provided a number of education and training opportunities to military personnel to prepare them for participation in peace operations. The opportunities can be divided into three categories: (1) institutional training and education conducted at service schools and war colleges, (2) specialized staff training for personnel likely to plan for and lead a multinational peace operation or the U.S. military contingent in such an operation, and (3) standard unit training conducted at home stations and at service training facilities. DOD and non-DOD organizations have issued a number of reports focused particularly on institutional and specialized staff training for peace operations.

At the unit level, training for the unique aspects of peace operations is conducted at home stations and at service training facilities. Military officials believe that well-trained and disciplined Army, Navy, Air Force, and Marine Corps units have the majority of skills required for peace operations, but most officials agree that some additional training is needed, particularly for ground combat units. While most of the basic tasks may be the same as those needed in combat, the tasks may be

performed differently because of different operating conditions and rules of engagement.

Commanders of ground combat units likely to participate in peace operations differ on when special training should be provided. Some of these commanders have incorporated some peace operations training into standard unit training because they believe this approach ensures they will be prepared for their mission, even if they receive little advance notice. In addition, they believe that many tasks and conditions associated with peace operations are the same ones their units will encounter on the future battlefield of war. Other commanders, who do not include peace operations training in standard unit training, believe that preparing for a worst-case, combat-oriented scenario is the best preparation for these operations. They believe that any special peace operations training should be provided after notification of participation.

When peace operations training is not included in standard unit training, the amount of notification before deployment becomes an important factor. When units are identified in advance for an operation—such as traditional peacekeeping operations in the Sinai or in Macedonia—special training has been provided prior to deployment. When operations result from developing world conditions, initial deploying units have had little time for special peace operations training. For example, initial forces deploying to Haiti in 1994 received less than 1 month's notice, as did initial Army and Marine units that deployed to Somalia in 1992.

It is difficult to assess the effect that receiving or not receiving peace operations training can have on a unit's ability to carry out its mission. A number of factors are involved in such an assessment, and information available to date has been mostly anecdotal. However, a number of senior military officials have concluded that familiarizing military personnel with the types of conditions they may encounter in a peace operation increases confidence, reduces the likelihood of incidents that may cause political embarrassment to the United States, and makes sense given the likelihood of having to respond to one of these operations.

Each peace operation differs in terms of its effect on a unit's combat capability. A number of variables determine the extent to which peace operations affect combat capability. These include the type of unit participating, the skills used or not used, the length of participation, and the in-theater training opportunities.

Some operations provide excellent experience that can improve the ability of various types of military units to operate in combat scenarios. For example, the tasks performed by some aviation, naval, ground support, and special operations forces in peace operations are very similar to what they could expect to do in a combat operation. As a result, participation in these operations has enhanced their capabilities, in many cases. According to a Marine Corps commanding general, the skills at greatest risk for atrophy during a peace operation are technical skills that are not employed in the operation and maneuver skills that require close coordination and integration. (Maneuver skills involve employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a mission.) In the 1994/95 Haiti peace operation, for example, there was no need for artillery, air defense, or Tube-launched, Optically-tracked, Wire-guided (TOW) missile fire. Military personnel from these specialties who deployed to Haiti and performed staff, security, and other miscellaneous functions found that their technical skills for operating artillery and providing air defense and tow missile fire were adversely affected. Even light infantry forces that do not have the opportunity to fully employ their skills in an operation face combat skill degradation if they have no opportunity to practice.

According to DOD, the greatest impact of participating in a peace operation comes from removing a unit from its normal training cycle. This problem can be exacerbated if a unit is separated from its basic combat equipment, as has been the case with the U.S. forces participating in the Macedonia peacekeeping operation.

The Secretary of Defense and others in DOD have stated that it is difficult to estimate the amount of time required to restore a unit's combat effectiveness across the full range of missions after a unit participates in a peace operation. Army commanders generally estimate a range of 3 to 6 months to fully restore a unit's war-fighting readiness after a peace operation. Marine Corps recovery time generally has been less because its role in peace operations has been of shorter duration than the Army. Maneuver and collective skills require the greatest attention once participation in a peace operation is completed. While aviation and naval

forces are less affected by peace operations than ground forces, some time is required to restore their combat proficiency, albeit significantly less time than for ground combat forces.

#### DOD Is Identifying Equipment Needs for Peace Operations

The Office of the Secretary of Defense, the military services, and DOD research organizations have been cooperating to identify equipment and technology requirements relevant to peace operations. The three broad classifications of requirements are (1) protection for personnel in armored and unarmored vehicles against mines and rocket-propelled grenades; (2) new systems to enable the military to fight in urban areas; and (3) options other than lethal force to discourage, delay, or prevent hostile actions by prospective opponents. These requirements also have applicability for combat operations. The Navy and the Air Force are not as involved in identifying technological requirements for operations other than war because they tend to perform the same types of operations during peace as they do in war.

Previous operations demonstrated the vulnerability of U.S. military vehicles to land mines and rocket-propelled grenades. In response, the Army, and to some extent the Marine Corps, have taken steps to enhance the protection of vehicles by procuring an armored HUMVEE that will enhance protection against some mines, testing armored tiles that can be installed on Bradley Fighting Vehicles to help protect against rocket-propelled grenades, and contracting for an armored security vehicle to be used by military police.

Operations other than war will increasingly involve operations in built-up urban terrain. A November 1994 Defense Science Board task force report identified required capabilities for military operations in built-up areas and recommended integrating existing and new technologies under operational doctrine developed specifically for such operations. The Army and the Marine Corps are cooperating in studying urban warfare technology and identifying particular equipment needs.

Ongoing research and development efforts into a number of nonlethal systems may enable U.S. forces, particularly ground forces, to minimize civilian casualties, avoid unnecessary property damage, and help protect U.S. personnel. The Office of the Secretary of Defense is developing a draft policy on the use of nonlethal weapons. In the interim, the Army and the Marine Corps have been identifying appropriate systems and purchasing them commercially or working with laboratories to develop or acquire the

equipment. In preparation for its February 1995 operation to protect the withdrawal of U.N. forces from Somalia, the Marine Corps acquired and trained personnel to use nonlethal systems. Marines used sticky foam, aqueous foam, and road spikes as obstacles and barriers and brought with them, but did not need to use, a variety of nonlethal munitions.

#### Recommendations

This report contains no recommendations.

# Agency Comments and Our Evaluation

 ${\tt DOD}$  concurred with a draft of this report.  ${\tt DOD}$  's comments appear in appendix I.

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#### **Abbreviations**

AWACS	Airborne Warning and Control System
CINC	Commander in Chief
CMTC	Combat Maneuver Training Center
DOD	Department of Defense
JRTC	Joint Readiness Training Center
MEF	Marine Expeditionary Force
MFO	Multinational Force and Observers
TOW	Tube-launched Ontically-tracked Wire-guide

#### Introduction

U.S. military forces are engaged in a number of missions that are different from most of those of the Cold War period. The U.S. defense strategy calls for the maintenance of military forces that are flexible enough to accomplish diverse missions. Peace operations are among these missions. Within the last 5 years, U.S. combat units have participated in peace operations in locations such as Somalia, Macedonia, Bosnia, Haiti, the Sinai, and northern and southern Iraq.

#### Present Policy Requires U.S. Forces to Be Prepared for Peace Operations

According to the President's February 1995 National Security Strategy, the primary mission of U.S. military forces is to deter and, if necessary, fight and win conflicts in which the most important interests of the United States are threatened. Nevertheless, to support the administration's strategy of engagement, the United States has adopted a defense strategy that calls for the maintenance of robust and flexible military forces that can accomplish a number of missions. The National Security Strategy and other defense planning documents have identified peace operations among the missions that U.S. military forces must be prepared to undertake. According to these documents, U.S. forces deployed to these operations should be provided with sufficient capabilities to fulfill their assigned missions. In many cases, this may require specialized training.

#### Peace Operations Present Unique Challenges to U.S. Military Forces

According to the May 1995 Report of the Commission on Roles and Missions, peace operations warrant appropriate training and equipment because of the often unique characteristics of these operations. The report also states that the difficulty of these operations cannot be underestimated. For example, in peace operations, the enemy is no longer easily identified approaching in a tank or an armored personnel carrier. Also, military tasks common to both war and peace—such as patrolling or escorting convoys—may have a fundamentally different purpose and be conducted in a vastly changed environment. Finally, the use of overwhelming and decisive force, the central tenet of U.S. war-fighting doctrine, often has little relevance to peace operations.

DOD is still coming to terms with the unique challenges associated with peace operations. As part of this effort, the Army recently published a new field manual to assist commanders and their staffs in planning and

<sup>&</sup>lt;sup>1</sup>For the purpose of this report, peace operations include everything from low-intensity peacekeeping operations, such as military observer duty, to high-intensity peace-enforcement operations. In addition to peace operations, the Department of Defense (DOD) continues to participate in humanitarian and disaster relief operations, as it has done for many years. A broader term, "operations other than war," encompasses all of the above activities.

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conducting these operations. Similarly, the Marine Corps is revising its Small Wars Manual concerning experiences the naval services have gained in operations other than war since the end of World War II and is developing a handbook to assist commanders who may be participating in peace and foreign humanitarian assistance operations.

#### DOD and Non-DOD Studies Have Identified Education and Training Needs

DOD is increasingly recognizing the importance of providing education and training for peace operations, particularly at the institutional level. Within the last year, a number of DOD and non-DOD reports have been published that identify and assess the education and training opportunities DOD provides for peace operations and for additional operations other than war. For example, in September 1994 the DOD Inspector General issued a report on specialized military training for peace operations and a catalog of peace operations training activities that identify and discuss various U.S. and international peace operations training programs, primarily at the institutional level. The report identifies gaps in three areas where U.S. preparation for peace operations could be enhanced in the near term: (1) U.N. observer training; (2) use of existing U.S. and foreign training programs and educational opportunities; and (3) staff and interagency training, particularly joint task force training for peace operations. A February 1995 report prepared for the Assistant Secretary of Defense (Strategy and Requirements) by a non-DOD organization provides additional detail concerning training and education requirements for peace operations, assesses current programs in the U.S. military, and recommends strategies to enhance preparedness for such missions.

In April and May 1995, a two-phase conference and follow-on exercise on peace and humanitarian operations sponsored by the I Marine Expeditionary Force (I MEF) and the U.S. Department of State, was conducted at Camp Pendleton, California. A summary report highlights the policy, strategy, and operational issues that resulted from the conference.

# Objectives, Scope, and Methodology

The former Chairman and Ranking Minority Member of the Subcommittee on Oversight and Investigations, House Committee on Armed Services, asked us to examine (1) how the services incorporate peace operations into their various training programs, (2) what effect peace operations have on maintaining combat readiness, and (3) whether the services have the weapon systems and equipment they need for these operations. We did not assess whether the United States should participate in peace operations.

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To determine how the services incorporate peace operations into their institutional, staff, and unit training programs, we reviewed training plans, lessons learned from recent operations, and published DOD and non-DOD reports on peace operations training. We concentrated our efforts on unit training and supplemented information already available on institutional and staff training. We visited the home bases of various Army, Navy, Air Force, and Marine Corps units that participated in peace operations and talked with personnel about the training they received. We also talked with officials and personnel at various advanced-level training facilities, such as the Army's Joint Readiness Training Center (JRTC) and the Combat Maneuver Training Center (CMTC), to obtain an understanding of the peace operations training provided. To understand the U.S. Atlantic Command's role in preparing joint forces for peace operations missions, we talked with command representatives and reviewed relevant documentation.

To determine the impact of peace operations on combat readiness, we reviewed the experiences of combat, support, and special operations forces who participated in Operations Uphold Democracy in Haiti, Able Sentry in Macedonia, Deny Flight in Bosnia, and Provide Comfort in northern Iraq. We also obtained some information on the experiences of Army and Marine Corps personnel who had participated in the 1992-93 Somalia peace operations and the impact that these operations had on the units' ability to return to combat readiness. We visited the home bases of units that had participated in peace operations, and to the extent possible, visited actual operations, such as the one in Macedonia. We talked with and obtained documentation from personnel attached to the Army's 10th Mountain Division (Light), II Marine Expeditionary Force (II MEF), and units from the 1st Armored and 3rd Mechanized Infantry Divisions in Europe concerning the extent of combat skill atrophy after participating in peace operations and the effort required to return to combat readiness. We visited Air Force units at their home bases and at their deployed locations in Aviano, Italy, and Incirlik, Turkey, near Operations Deny Flight and Provide Comfort. We talked with and reviewed documentation from military commanders concerning the combat proficiency of their units after participating in peace operations and their plans for restoring full war-fighting capabilities. We discussed the effect of Navy participation in Caribbean peace operations with representatives of various elements of the U.S. Atlantic Fleet and examined documents describing the impact of peace operations on Navy training cycles.

To determine whether the services have the weapon systems and equipment they need for these operations, we examined reports by DOD

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agencies and documents from the military services involved in identifying technological requirements. We discussed the involvement of the Office of the Secretary of Defense in identifying new technologies and also examined a draft policy statement on the use of nonlethal weapons. I MEF officials from Camp Pendleton, California, and from the Marine Corps Combat Development Center in Quantico, Virginia, provided us with information concerning their experiences in obtaining, training with, and using nonlethal systems and equipment during Operation United Shield, protecting the withdrawal of U.N. forces from Somalia.

Our review was conducted at Army, Navy, Air Force, and Marine locations, Office of the Secretary of Defense, and component and unified command headquarters within the United States and Europe. We contacted by telephone any relevant organizations we did not visit, such as the 25th Infantry Division (Light) at Schofield Barracks, Hawaii; the Multinational Force and Observers (MFO), Fort Bragg, North Carolina; and the Army Dismounted Battlespace Battle Laboratory at Fort Benning, Georgia. In many cases, we received written responses to our questions. We did not address the financial impact on the services as a result of participating in peace operations. This issue was addressed in a previous GAO report.2 We also did not report on the participation of reserve forces in peace operations. While we did some limited examination of reserve component participation in peace operations, the training provided for these missions was not significantly different than training for standard reserve missions. Except in a few cases, the number of reserve component forces participating in these operations was relatively small.

Our review was performed from November 1994 to September 1995 in accordance with generally accepted government auditing standards.

 $<sup>^2</sup>$ Peace Operations: DOD's Incremental Costs and Funding for Fiscal Year  $\underline{1994}$  (GAO/NSIAD-95-119BR, Apr. 18, 1995).

Since the end of the Persian Gulf War, dod has provided a variety of education and training opportunities to military personnel to prepare them for participation in peace operations. Each service has a different approach to training its forces for peace operations. The services and the regional Commanders in Chief (CINC) have exposed at least some of their personnel to basic operating concepts through institutional training and education, specialized staff training, and unit training. At the unit level, peace operations training primarily involves ground combat forces. Commanders of major ground combat forces differ on when peace operations should be provided; some commanders include aspects of peace operations in standard unit training, and others prefer to maintain an exclusive combat focus until they are advised that their units are about to deploy to a peace operation. Naval and aviation forces perform similar tasks in peace operations and in war.

DOD Provides Institutional and Specialized Staff Training for Peace Operations Each of the services conducts a number of comparable courses at training facilities and schools in which peace operations are addressed as part of a progressive program of military training and education. The services' officer and noncommissioned officer courses, command and staff colleges, war colleges, professional schools for particular military specialties (e.g., infantry, amphibious warfare, and military police), and joint military education programs all include some discussion of peace operations in their curriculums, often as part of a broader discussion of operations other than war. Since DOD and non-DOD organizations have issued a number of reports on this subject, we are brief in describing DOD initiatives in this area.

Historically, the Army and the Marine Corps have had the greatest involvement in peace operations. They have developed and implemented the widest variety of programs on peace operations as part of their institutional training and education. The Army provides peace operations training and education at a variety of institutions such as the

- Army War College;
- · Command and General Staff College;
- Army Infantry School;
- Combat Training Centers;
- U.S. Military Observer Group;
- Army Peacekeeping Institute; and
- School for Advanced Military Studies at Fort Leavenworth, Kansas.

Peace operations initiatives in the Marine Corps include peace operations programs at the Amphibious Warfare School, the Command and Staff College, and the Marine Corps Basic School. In addition, at the recent peace and humanitarian conference and staff exercise held by I MEF and the Department of State, the following recommendation was made concerning improvement of professional military education:

Humanitarian assistance and peace operations require new ways of thinking and planning. Identifying an enemy, finding centers of gravity, and applying overwhelming force do not translate directly, and so, do not necessarily fit neatly into traditional operational planning. There may not be a direct military threat. In order to prepare military officers for future humanitarian operations, professional military education should increase emphasis on

- operations other than war case studies,
- humanitarian assistance operation wargaming and situational exercises, and
- role-playing scenarios.

The services and regional CINCS recognize that a key element in the successful execution of a peace operation is the training of the commanders and staff who plan and lead the operation both at the service and the joint task force levels. Consequently,

- regional CINCS have conducted workshops and seminars to prepare their staffs for leading peace operations in their areas of responsibility;
- the U.S. Army Peacekeeping Institute held a peace operations training program, at the request of the Chairman of the Joint Chiefs of Staff, for command level personnel serving on the staffs of Unified Commands, which was attended by interagency, Joint Staff, potential joint task force commanders, and the Chairman of the Joint Chiefs of Staff;
- the Army's Battle Command Training Program and the Center for Army Lessons Learned provided mobile training teams, training support packages, and operational lessons to prepare staff prior to a peace operation deployment;
- the Expeditionary Warfare Training Groups, under CINCS, Atlantic Fleet and Pacific Fleet, will provide, starting with a pilot planned for November 1995, a 5-day class on peace operations for Naval Expeditionary Force staff officers and senior noncommissioned officers; and
- the Partnership for Peace program, utilizing peace operations training as a venue for military-to-military contact, sponsored a 3-week seminar and a large peace operations field exercise that included representatives from

the U.S. military and from Ministries of Defense and General Staffs of other Partnership for Peace countries.

#### Unit Training Provides Key Capabilities for Peace Operations Missions

Unit training is conducted at home stations and at training facilities to help prepare units for their missions. Unit level training for peace operations primarily is an issue involving ground forces—principally infantry and mechanized infantry units. Naval and aviation forces, and other ground forces such as special operations, logistics, and military police units train similarly for peace operations and for war. However, even these forces have to adapt to the different conditions and rules of engagement they encounter in these operations.

The extent of additional preparation needed for peace operations depends on the type of operation and the type of forces assigned to participate. Some types of military forces adapt more easily to peace operations. For example, support units providing food and supplies to troops participating in the Somalia peace operation performed the same functions they would in a more traditional combat operation but in a less centralized fashion because forces were spread out over 21,000 square miles. They also had additional responsibilities because they had to provide most of their own security.

The tasks an infantry unit performs in a peace operation may be similar to the tasks it would encounter in combat, but they may be performed differently because the operating conditions, including rules of engagement, will be different. The peace operation in Haiti, for example, required that infantry units conduct mounted and dismounted patrols day and night, perform cordon and search, carry out reconnaissance, and provide security. These tasks are typically performed in a combat operation. However, in Haiti the night patrols were conducted under full illumination, as a show of presence, rather than in a more stealthy manner, as is the case in war. Further, in the cordon and search operations, before the military entered a building, occupants were given an opportunity to leave peacefully, and searches were conducted with limited inconvenience to the populace. This procedure reduced the level of violence and collateral damage that is likely to occur in war.

DOD and non-DOD studies and our own work on this subject indicate that, even though there can be considerable overlap between skills required for peace operations and those required in war, personnel assigned to peace operations missions need some degree of additional preparation.

Increasingly, military officials have recognized that peace operations pose a different set of challenges for the military, particularly ground forces. The Army's peace operations field manual states that units selected for these duties may be required to perform tasks that may be different from their wartime tasks and that training will be required. Military officials have noted that forces must learn to adjust to the unique rules of peace operations, such as restrained use of force. In addition, special training is needed to sensitize forces to local conditions, cultures, and laws, since ground forces will have extensive contact with the local populace and with government and nongovernment organizations.

While aviation forces perform similar tasks in peace operations and war, they, too, have to adjust when participating in peace operations. As a result of the shoot down of two U.S. Army Black Hawk helicopters participating in Operation Provide Comfort in Turkey in April 1994, the Air Force has increased training requirements for many of the Air Force units participating in peace operations. For example, to better prepare for peace operations missions, the Airborne Warning and Control System (AWACS) crews are undergoing (1) increased and improved study of the rules of engagement, including situational exercises, prior to deployment; (2) better predeployment training, including a certification briefing for their squadron commanders demonstrating their readiness for flying in the specific area of responsibility; and (3) increased training at the deployed location, including another formal, documented certification process. In addition, the Air Force has issued guidance for (1) fighter combat crew training to incorporate theater-specific rules of engagement and situational training into academic, simulator, and flying training; (2) major commands to develop a standard training program on theater orientation; and (3) the fielding of a computer-based aircrew visual identification training program.

#### Ground Combat Commanders Differ on When to Provide Peace Operations Training

Some Commanders Incorporate Peace Operations Into Standard Unit Training

Traditionally, Army and Marine Corps units begin training for the unique aspects of peace operations after the units have been notified of their participation. However, several commanders of major combat forces in the Army and the Marine Corps have incorporated some peace operations training into standard unit training. They have done so for several reasons. First, they believe that as infantry, their units likely will be the ones tasked to respond to peace operations. Second, they believe that regular training for some peace operations tasks and conditions reduces the preparation time needed prior to deployment and allows their units to focus on more mission-specific requirements. Third, the commanders believe that they will encounter some of the peace operations tasks and conditions, such as the media, refugees, and civilian communities, on future complex battlefields. Following are descriptions of the training approaches of U.S. Army, Europe, units, the 25th Infantry Division (L), and I MEF.

U.S. Army, Europe

The major Army combat units in Europe—the 3rd Infantry Division (Mechanized) and the 1st Armored Division—have incorporated peace operations tasks as a regular part of their collective training events because of current involvement and likely future involvement in peace operations. In addition, U.S. Army, Europe, officials stated that the training used for peace operations is also part of what is required to operate successfully on complex battlefields. Peace operations training is incorporated both at home stations and into rotations at the Army's cmtc. In 1993, U.S. Army, Europe, incorporated a peace operations training module into each of its maneuver battalion's annual 21-day cmtc rotations. This module, which lasts 2 to 5 days, is mandatory for all U.S. Army, Europe, units. cmtc utilizes a complex battlefield environment to test a battalion's ability to accomplish missions under two separate U.N. mandates—peacekeeping and peace enforcement. Peacekeeping missions tested in the module include establishing, operating, and reinforcing

<sup>&</sup>lt;sup>1</sup>CMTC, in Hohenfels, Germany, is one of the Army's four combat training centers. It provides advanced combined arms training for Europe-based heavy forces in a low- to high-intensity combat environment.

observation posts and checkpoints and securing convoy operations. Peace enforcement missions include, for example, monitoring the separation zone between belligerent parties, attacking and defending. As of October 1994, 20 U.S. Army, Europe, maneuver battalions had completed the module, and many battalions have gone through the program twice.

U.S. Army, Europe, has identified the following critical tasks as fundamental to peace operations:

- · conduct patrols,
- · establish/operate observation posts,
- set up/operate checkpoints,
- plan for media,
- conduct liaison/negotiate,
- · escort a convoy,
- · react to an ambush,
- · respond to indirect fire,
- · establish lodgment,
- provide command and control,
- · conduct mine clearance, and
- secure a route.

CMTC uses these critical tasks in its rotations and suggests that U.S. Army, Europe, leaders also use them to prepare and train for peace operations and evaluate unit readiness. In addition to identifying tasks and missions, CMTC developed a Peacekeeping Operations Mission Training Plan to (1) assist units in home station training, (2) serve as a training readiness standard for assessing how well a unit performs its mission essential tasks, and (3) establish a foundation for predeployment training for units tasked to support a U.N.-sponsored peace operation. The training plan combines the previously identified tasks with corresponding training and evaluation outlines.

25th Infantry Division (L)

According to 25th Infantry Division (L) officials, the Division Commander<sup>2</sup> believed that incorporating some peace operations training in standard unit training can enhance combat skills and capabilities, since troops will likely encounter many of these tasks and conditions on complex future battlefields. Further, the Commander believed that by preparing for peace operations in advance, the Division can focus on more mission-specific requirements once tasked to respond to a peace operation. The

<sup>&</sup>lt;sup>2</sup>The Commander of the 25th Infantry Division (L) at the time we conducted our work assumed another position within the Army. The discussion in this section concerns the period of time when he was the Commanding General.

Commander regularly included the following elements in the 25th Infantry Division (L)'s battalion and brigade exercises: civilians on the battlefield, interaction with nongovernmental organizations, the media, coalition and U.N. forces, and use of crowd control measures.

From January to April 1995, the Division participated in the Haiti peace operation with the primary mission of maintaining a stable and secure environment. The Division had about 7 weeks' notice of its deployment and spent about 3 of those weeks planning for the mission. Representatives went to Haiti to obtain a clear understanding of the mission and the operating environment. The Division also worked closely with a representative from the Center for Army Lessons Learned to gain additional perspectives on the operating environment and training needed, coordinated with the 10th Mountain Division (L), and received assistance from a JRTC Mobile Training Team.

The remaining time was devoted to mission-specific training and other deployment requirements. According to Division officials, each infantry battalion spent about 7 days on weapons qualification/close quarters combat training, 10 days on situational exercises, and 6 days on leader training. Combat support and combat service support units spent approximately 10 days on specialized training for Haiti. Finally, equipment and order preparation, deployment briefings, and loading of equipment on the ships consumed the remaining time. In its training, the Division concentrated on 31 tasks that had been identified through mission analysis and coordination with 10th Mountain Division (L) and Center for Army Lessons Learned representatives. Each task was instructed in the classroom, discussed in relation to the rules of engagement and the uses of graduated responses, and then the task was practiced under field conditions in hands-on situational training exercises. Tasks included day and night patrols, checkpoint operations, convoy operations, civil disturbance, military operations in urban terrain, and political rallies security.

The Division had not previously participated in a peace operation; however, one of its brigades had completed a peace enforcement rotation at JRTC<sup>3</sup> a few months earlier, and the other brigade had just completed an internal evaluation exercise that included operations other than war tasks.

<sup>&</sup>lt;sup>3</sup>JRTC, Fort Polk, Louisiana, is one of the Army's combat training centers. It provides advanced combined arms and joint training for Army and Air Force contingency forces, located principally in the United States, in a low- to mid-intensity combat environment. Commanders can choose between a combat-oriented or a peace enforcement exercise for their units. To date, there have been two peace enforcement exercises at JRTC, one in 1993 and the other in 1994.

According to Division officials, both experiences provided a good base from which to add other mission-specific peace operations training and significantly contributed to their successful performance in Haiti.

Based upon his experiences in Haiti and the training received at JRTC, the Commander articulated a 5-pronged training strategy that would more extensively integrate the tasks and conditions of operations other than war into standard unit training for light Army infantry units. He directed most of his points to the training conducted at Army combat training centers, in particular JRTC. They are as follows:

- Integrate operations other than war factors into conventional training.
- Periodically participate in a peace enforcement rotation at an Army combat training center.
- Integrate a 1-or 2-day optional peace enforcement package into the leadership training program at Army combat training centers.
- Integrate peace operations into a program of instruction at the command and general staff college and at the war college.
- Dedicate some operations other than war training for leaders in the following areas: intelligence, coalition logistics, measures of effectiveness, negotiation skills, country team relations, nongovernmental organizations, U.N. agencies, media management, and psychological operations.

I Marine Expeditionary Force

The I MEF Commanding General at Camp Pendleton, California, believes that standard unit training may need to address some aspects of peace operations that differ from more traditional combat operations, such as the employment of nonlethal systems and equipment. Incorporation of those aspects can be done, he believes, without degrading the combat capability of U.S. military forces and may in fact enhance combat capabilities, based on his past participation in peace operations. While the General believes that the most effective training for peace operations is training centered on basic Marine fundamentals, he also believes that operations other than war are here to stay and that the U.S. military needs to be able to respond effectively to them.

The General was tasked with forming the command element of a Combined Task Force to secure the withdrawal of U.N. peacekeepers from Somalia. Operation United Shield, which began in February 1995, involved the 13th Marine Expeditionary Unit—Special Operations Capable (which at that time was forward-deployed in the Persian Gulf), command staff from I MEF, and certain other Air Force, Navy, and Army personnel. Standard training in combat and operations other than war prepared the

forces for this operation. However, when it became clear that unarmed hostile elements in Somalia could pose a substantial threat to withdrawing U.N. forces, the I MEF Commander trained his forces while en route to Somalia to use nonlethal systems and equipment to provide a graduated response capability. (Ch. 4 provides detail on nonlethal systems and equipment.)

As part of its regular training for operations other than war, I MEF has conducted an exercise in each of the last 2 years, called Emerald Express, to test, validate, and refine a concept of operations for conducting emergency humanitarian relief and peace operations. The 1994 exercise was computer-generated; the 1995 exercise included a two-phase conference preceding a joint task force-oriented staff exercise. According to I MEF officials, the Emerald Express exercise will enable I MEF to meet its required mission as the joint task force for a peace or humanitarian operation in the U.S. Central Command operating area and will support a number of longer-term efforts, such as a Commander's handbook for humanitarian assistance and peace operations.

The 1995 conference and exercise resulted in a number of recommendations. In the area of preparedness and training, the summary report states that disciplined and adaptable military forces are well-suited to meet the demands of most missions. Nevertheless, the report states that humanitarian assistance and peace operations require certain skills that justify increased training emphasis, even though the military currently trains in most of these areas. In particular, the report recommends that the military bolster skills in military operations in built-up (urban) areas, crowd control methods, and negotiating.

Some Commanders Provide Peace Operations Training Upon Notice of Deployment Some commanders in the Army and the Marine Corps prefer to place exclusive emphasis on combat-oriented training. They believe that this training is the best preparation for peace operations, particularly given the potential that violent scenarios may erupt that will require more combat-oriented skills. They also believe that peace operations-specific training can be provided to forces after they have been notified of their participation in such an operation. Following are descriptions of the training approaches of the 10th Mountain Division (L) and II MEF.

#### 10th Mountain Division (L)

The Commander of the 10th Mountain Division (L)<sup>4</sup>, which deployed to Haiti from September 1994 through January 1995 and participated in the Somalia peace operation in 1992 and 1993, stated that standard Army training is the best preparation for peace operations. He believes that many combat tasks are also applicable to peace operations. During unit training at home stations and at Army training facilities, the 10th Mountain Division (L) focused on combat training.

When tasked to respond to a peace operation, the Division has provided mission-specific training, time permitting, during the period prior to deployment. The Division received formal notification of its Haiti tasking approximately 30 days prior to deployment. Based on initial operational plans, the Division was to make a forced entry. Therefore, preparatory training had a combat-orientation. It then assembled a group of officials from the U.S. Atlantic Command, the Army, and other U.S. government organizations to help prepare the Division for its mission. In early August 1994, the Division Commander issued training guidance in preparation for the Haiti mission, including tasks for particular emphasis. These included

- convoy and convoy security,
- · security of nongovernment/private volunteer organizations,
- · cordon and search,
- · embassy security,
- noncombatant evacuation operations,
- aviation deck qualification (to operate from aircraft carriers),
- · air assault,
- strike force operations,
- · port security, and
- military operations in urban terrain.

The Division had about 15 days for training once it had analyzed its mission, built a mission training plan, and accomplished the myriad of other tasks required to deploy. The tasks were rehearsed through the combined joint task force and maneuver forces and then carried out in company level live fire exercises, day and night, involving combined arms, AC-130s, and Cobra gunships. According to Division officials, the objective

<sup>&</sup>lt;sup>4</sup>During our field work, the Commander retired from the Army. The discussion in this section concerns the period of time when he was the Commanding General.

<sup>&</sup>lt;sup>5</sup>Due to the last minute agreement reached between the Carter/Nunn/Powell delegation and Lieutenant General Cedras, Haiti's military dictator, the landing was executed under peacetime rules of engagement.

was to tune the force to the roughest situation that might be encountered, such as a night fire fight in downtown Port-au-Prince. The soldiers and leaders would then be ready for whatever might happen.

Some Division units trained to a limited extent on peace operations-specific conditions during this period, such as dealing with the local populace, crowd control, use of cayenne pepper spray and riot control gear, and specifics concerning the cultural environment. Because of the limited preparation time, however, units primarily stressed standard combat skills. According to Division personnel we interviewed, the Division's previous peace operations experience in Somalia was key to its ability to deal with some of the challenging peace operations-specific tasks it undertook in Haiti. However, in a written response to us about predeployment training, one brigade official stated that crowd control and country training (e.g., culture and language) should have been stressed further during predeployment training.

#### II Marine Expeditionary Force

In recent peace operations, Marine forces have provided initial force presence and then were replaced by other forces, usually Army, that remained for a longer time period. As a result, some Marine commanders believe that Marine forces may not need as much special peace operations training as does the Army. The Commanding General, II MEF, believes that standard Marine training should maintain a strong combat focus rather than include additional peace operations tasks. Furthermore, he believes that standard Marine training already includes some of the tasks Marine personnel may perform in a peace operation, such as noncombatant evacuation operations, military operations in urban terrain, and crowd control, and that more mission-specific training should be provided after notification of deployment.

In a case recently with one of his units, the limited notification time prevented much training prior to deployment, but the unit did have time once in theater to train to special requirements. Specifically, in the summer of 1994, the 2nd Battalion of the 2nd Marine Division and other Marine forces were tasked to respond to worsening conditions in Haiti. With no more than 3 weeks to prepare, the battalion focused on high-priority training requirements and on other necessities such as ensuring all personnel had required immunizations. The battalion conducted additional training en route and in the Caribbean area of operation. According to battalion officials, the additional training time was beneficial, particularly since the unit had received limited predeployment training. The training included a noncombatant evacuation exercise, a

tactical recovery of aircrew and personnel, live fire and maneuver training, and some training in civil disturbance and crowd control techniques.

#### Notification Time Is Key in Providing Training

Units Deploying to Long-Standing Peacekeeping Operations Receive Several Months of Advance Training When units are identified well in advance for an operation, special training has been provided. Units involved in long-standing peacekeeping operations, such as in Macedonia and in the Sinai, have received extensive predeployment training. These units are notified from 4 months to 1 year before their deployment and obtain about 3 months' training depending on the type of unit and its function in the operation.

Since July 1993, the U.S. Army, Europe, has regularly supplied between about 300 and 500 Army personnel, on a 6-month rotation, to support Operation Able Sentry in the former Yugoslav Republic of Macedonia. This U.N. operation requires deployed units to monitor the border areas of Macedonia, with Albania, Serbia, and Montenegro and report any development that could undermine confidence and stability in Macedonia or threaten its territory. Of the five deployments since June 1993, four involved mechanized infantry units and one involved an infantry unit. A mechanized infantry unit typically devotes a majority of its time training with the Bradley Fighting Vehicle. Since Operation Able Sentry requires basic infantry skills, the mechanized infantry units train significantly differently for this operation than they would for a combat operation involving their Bradley Fighting Vehicles.

Units deploying to the Sinai as part of a 6-month rotation to the MFO typically are light infantry units based in the United States. Their primary mission in the Sinai is to observe and report all military activities in the area of operations to all parties to the Treaty of Peace between Egypt and Israel. Some of the tasks MFO infantry battalions perform as part of the mission, and for which they obtain training, include

- conducting vehicle patrols,
- establishing and occupying temporary observation posts, and

 observing and reporting (1) incidents and possible violations and
 (2) navigation of ships through the Strait of Tiran and within the Gulf of Aqaba.

#### Training Time Is Sometimes Limited for Short-Notice Deployments

When operations result from developing world conditions, initial deploying units may not have time to conduct special training prior to deployment. For example, the Marine Corps battalion that deployed to Haiti in August 1994 received 3 weeks' notice. Units from the Marine Corps' I MEF and the Army's 10th Mountain Division (L) received fewer than 3 weeks' notice before deploying to Somalia in 1992. Initially deploying units to the 1994 humanitarian operation in Rwanda received less than 2 weeks official notification of their participation. Under these circumstances, units tasked to the Haiti and Somalia peace operations focused on ensuring that priority combat skills and capabilities were practiced before deployment. They tried to obtain additional training en route to the operation and/or in the operating theater. A June 1995 interim report by the Center for Army Lessons Learned confirms that with little advance notice, units designated for a peace operation spend most of their time executing their deployment standard operating procedures and have little time left for special training.

#### Assessing Impact of Peace Operations Training Is Difficult

It is difficult to assess the effect that receiving or not receiving peace operations training can have on a unit's ability to carry out its mission in a peace operation. A number of factors are involved in such an assessment, including the nature of the operation and the unit's prior peace operations experience, if any. In addition, measures of success for a peace operation are not easily identified. The Center for Army Lessons Learned, for example, has provided after-action reports and lessons learned, based on anecdotal information, concerning the positive effect of providing training in the unique aspects of peace operations. However, there is little evidence that links the lack of specific training to the failure to perform a task or to respond effectively to a particular situation.

Despite this difficulty, a growing number of military and nonmilitary officials are acknowledging that some training in operations other than war should be incorporated into standard unit training for units likely to perform these missions because the time may not be available prior to deployment. The Director of the Army Peacekeeping Institute, for example, stated that he believes a well-trained and disciplined unit is the best foundation upon which to prepare for a peace operation, but he

stated that he also firmly believes that additional peace operations specific training is needed and that it cannot be delayed until the unit is alerted for a mission. Other Army and Marine Corps officials with whom we spoke said that familiarizing military personnel with the types of conditions they may encounter in a peace operation, on a regular basis, increases confidence, may benefit combat capabilities, and reduces the likelihood of incidents that may cause political embarrassment to the United States.

Combat skills can atrophy if not used or practiced repeatedly. Each peace operation offers unique conditions that may affect combat capabilities differently, depending upon the nature and duration of the mission and other variables (such as the type of unit involved and skills employed). These variables also affect the amount of time needed to recover war-fighting skills after a peace operation. The recovery period is longest for ground combat forces. According to various senior military commanders who participated in peace operations, the erosion of combat proficiency can be alleviated by (1) selecting units with the most applicable skills for a peace mission, (2) limiting the length of the deployment by rotating forces if necessary, and (3) providing quality in-theater training opportunities.

#### Variety of Factors Affect Combat Capability

According to DOD, readiness for combat is the highest priority for U.S. military forces in order for them to fight and win the nation's wars, should deterrence fail. Forces engaged in a peace operation could be called upon either during or shortly after the operation to redeploy to a higher intensity conflict where combat skills will be critical to mission success and the survival of individual service men and women.

Each peace operation differs in terms of its effect on a unit's combat capability. Some operations provide excellent experience that can improve the ability of various types of military units to operate in combat scenarios; others may benefit only certain types of units. The following variables determine the extent to which peace operations affect combat capability and the time needed to recover from a peace operation:

- · type of unit,
- skills used/not used,
- length of participation, and
- in-theater training opportunities.

Peace Operations Have Varying Impact on Military Units, With Ground Combat Units Most Adversely Affected Of the ground combat forces, mechanized infantry, armored units, and units that are heavily equipment dependent (such as artillery) face the greatest combat skill erosion when they participate in a peace operation, particularly when they participate without their equipment and perform tasks that are significantly different than the combat tasks to which they train. This has been the case in recent operations. For example, a mechanized infantry unit from the 3rd Infantry Division in Europe experienced significant combat skill degradation during its 6-month

deployment to Operation Able Sentry in 1994. Most of the required tasks were different from the unit's war-fighting tasks. For example, the major task in Macedonia was to observe and report. However, the unit's combat tasks included breaching an obstacle, attacking, defending, and supporting by fire. The unit deployed without its primary tactical vehicle, the Bradley Fighting Vehicle, and did not have access to a Bradley simulator while in Macedonia. Furthermore, U.N. guidelines prohibited the unit from engaging in maneuver or other collective training in Macedonia. Lack of training in gunnery and maneuver skills resulted in degraded combat capabilities. Upon redeployment, the unit received the lowest score in its divisionwide Bradley qualification test. With 3 months of training, the unit increased its readiness ranking to satisfactory.

Infantry units also experience combat degradation, particularly in maneuver and collective skills, when they participate in a peace operation.<sup>2</sup> However, the skill degradation is less than for the heavier, more equipment-dependent units.

In its comments to a draft of this report, DOD noted that the greatest impact comes from removing a unit from its normal training cycle managed by its higher headquarters. Each of the services requires repetitive, cyclical collective training events that are progressive in nature. At the higher end of this progression, resources such as training areas and ranges, unit combat equipment, and access to simulators become critical in maintaining combat capability. In most instances, these resources are not available at deployed peace operations locations. This problem can be exacerbated if a unit is separated from its basic combat equipment, as is the case with Operation Able Sentry in Macedonia. Further, the quality of the maintenance on that stay-behind combat equipment during the deployment is key to the eventual retraining process back to a war-fighting focus upon return.

Commanders of Army and Marine Corps support units that have participated in peace operations stated that the operations did not significantly degrade their capabilities.<sup>3</sup> In most cases, their capabilities were enhanced, they said, because the support requirements for a peace

Support Forces

<sup>&</sup>lt;sup>1</sup>Deploying with a simulator would have created a divisionwide shortage of simulators, according to a Third Infantry Division (Mechanized) official.

<sup>&</sup>lt;sup>2</sup>Maneuver skills involve employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a mission. Collective skills involve more than one unit operating together.

<sup>&</sup>lt;sup>3</sup>Support forces include engineer, transportation, logistics, and military police units.

operation are similar to those for war. For example, officials from the 10th Division Support Command of the 10th Mountain Division (L) stated that the Command's expertise was enhanced by supporting a real logistics mission. The primary limitation to maintaining skills, according to these officials, was placing units in static locations as opposed to a fluid battlefield environment, which requires coordinated actions. Similarly, the Commander of the 10th Military Police Battalion told us that the Haiti mission coincided with military police training and doctrine. However, some skills directly related to the military police combat mission, such as attack skills, did deteriorate because they were not used in the operation.

The return and maintenance of equipment is an important factor in restoring combat readiness to support forces, since equipment such as trucks, engineering equipment, and water purification units is an integral part of support operations. After participating in the Somalia peace operation, for example, some 10th Mountain Division (L) support units encountered readiness difficulties due to the slow return of their equipment and its poor condition once returned.

#### **Special Operations Forces**

Representatives from special operations units stated that for Civil Affairs, Psychological Operations, and most Special Forces units, the skills they use in peace operations are similar to those they expect to use in war.<sup>4</sup> They point out, however, that the different operating conditions may require that some of their skills be used differently. For example, while message dissemination is a requirement of Psychological Operations units in both war and peace operations, the method of dissemination may differ. Peace operations require more face-to-face contact with the local population. While peace operations have generally enhanced the combat capabilities of special operations units, representatives noted that the high operating tempo since the end of Operation Desert Storm has, in some cases, made it difficult for personnel to attend schools and accomplish other requirements to maintain special skills (e.g., languages and other regional skills).

Peace Operations Offer Opportunity to Practice Some Combat Skills, but Others May Atrophy Peace operations can provide excellent experience in many of the skills a light infantry unit might require in a combat operation, such as command and control, intelligence, logistics, individual and team training, deployment training, and staff experience. The Commanders of the 10th Mountain and 25th Infantry Divisions (L) stated that their forces received

 $<sup>^4</sup>$ Special operations forces include Special Forces, Civil Affairs, Psychological Operations, and Ranger units.

valuable experience by participating in the Haiti peace operation and that many capabilities improved by participation. In responding to a question from the Chairman of the Joint Chiefs concerning his division's combat readiness, the Commander of the 25th Infantry Division (L) stated that because of this participation, the Division's overall mission capability improved from a 7+ score (on a 10-point scale) before deployment to a 9 afterwards.

While participating in a peace operation can improve a unit's overall operating capabilities, certain skills and capabilities may be degraded because they are not practiced during the operation. According to the I MEF Commander, the skills at greatest risk for atrophy during an operation other than war are technical skills that are not employed and maneuver skills that require close coordination and integration. In Haiti, there was no need for artillery, air defense, or Tube-launched, Optically-tracked, Wire-guided (TOW) missile fire, nor was there an opportunity to practice those skills at a training range. The 10th Mountain Division (L) deployed with some of its artillery personnel, but they performed staff, security, and miscellaneous functions. Since the personnel did not deploy with their howitzers, they could not engage in fire support activities or train with their primary mission equipment. Upon return from Haiti, artillery units rated lowest (along with air defense) of all 10th Mountain units in combat readiness. However, according to unit commanders, the units recertified their ability to deliver artillery fire within 6 weeks.

Even light infantry forces that participate in peace operations do not always have the opportunity to fully use the skills they might encounter in war. For example, the static security mission in Haiti (guarding the Presidential Palace and other key facilities) required only limited combat skills; however, commanders rotated military personnel to the training range on a regular basis where they could practice to some extent the skills not used in the actual operation.

Traditional peacekeeping operations, such as those ongoing in the Sinai and in Macedonia, involve significantly different operating conditions than can be expected in war, and many combat skills cannot be exercised. In the Sinai, for example, U.S. battalion-size light infantry units are assigned to the MFO for 6-month rotations to operate checkpoints and observation posts and conduct reconnaissance patrols in security zones within the Sinai Desert, Egypt, and Israel along the international border. While some skills such as common soldier skills, individual weapons proficiency, land

navigation, and situation reporting can be practiced during MFO deployments, training for many combat skills, particularly at the company level and above, is prohibited under the terms of U.S. participation in the MFO. According to MFO officials, the following training cannot be conducted during MFO deployments:

- movement to contact (at company level and above),<sup>5</sup>
- military operations in urban terrain,
- · crew-served weapons,
- platoon-level patrolling,
- · ambushes,
- · secure communications, and
- airborne/airmobile operations.

DOD sources stated that once MFO units return to their home stations, they generally require a month to restore individual skills and up to 3 months to restore collective skills.

The Longer a Unit Participates in a Peace Operation the Greater the Adverse Effect on Combat Skills Unit commanders estimated that missions lasting 4 to 6 months and longer are more likely to cause more significant degradation of combat readiness and require more extensive restoration periods than shorter missions. The Commanders of the 10th Mountain Division (L) and the 25th Light Infantry Division (L) attributed the relatively limited combat degradation of their units during the Haiti operation in part to their limited participation—about 4 months each. Similarly, the average deployment time for Army units participating in the Somalia operation was 3 to 4 months. Units remaining beyond that time experienced more significant combat skill degradation, according to unit commanders. Because the Marine Corps' role in peace operations generally has been of shorter duration than the Army's, the impact on Marine Corps combat skills has been relatively minimal, according to Marine officials. In Haiti, for example, the Marine Corps' mission was to establish a secure and stable environment in the Cap-Haitien area of northern Haiti. Since they were replaced by Army troops after only about 2 weeks in-country, commanders said that combat skills deteriorated very little and recovered quickly once training resumed.

<sup>&</sup>lt;sup>5</sup>Movement to contact means finding and engaging the enemy.

#### Establishing In-Theater Training Opportunities Reduces Combat Skill Erosion

Recent peace operations have provided various opportunities for in-theater training, particularly in individual skills. According to the I MEF Commanding General, for example, commanders need to be creative and take the initiative with regard to in-theater training. He firmly believes that in most cases, in-theater training can be provided to minimize combat skill loss.

In Haiti, 10th Mountain and 25th Light Infantry Division (L) personnel rotated regularly to a sophisticated training facility constructed at a former Haitian military firing range. The facility enabled units to conduct live fire and maneuver training. According to 25th Infantry Division (L) officials, infantry companies trained 2 or 3 days every 3 weeks, time permitting, and support unit training occurred at the squad and team levels as time allowed. This prevented skill loss, particularly for infantry personnel assigned static security missions where they could not utilize all of their infantry capabilities.

During the 1992-93 peace operation in Somalia, numerous training sites were available to reduce combat skill atrophy. While the sites were not as sophisticated as the training facility in Haiti, forces were still able to practice individual weapon skills.

While in-theater training facilities enable general infantry forces to maintain many of their combat skills, these facilities typically have not provided training opportunities, beyond basic soldier skills, for artillery and mechanized infantry personnel that participate in peace operations. Using combat simulators is a way to obtain this training; however, simulators have not always been available to deploying units, as in the case discussed earlier of mechanized units that deployed to Macedonia. Some Army commanders are making an effort not to deploy units whose primary mission skills will degrade significantly by participating in a peace operation. Because of a need for personnel, the 10th Mountain Division Commander used artillery personnel to perform miscellaneous functions in Haiti; however, they generally did not stay for more than 2 months at a time.

#### Recovery Period Is Longest for Ground Combat Forces

According to the Secretary of Defense, it is difficult to estimate the amount of time required to restore a unit's combat effectiveness across the full range of missions after participating in a peace operation because restoration time varies greatly depending on the nature of the operation and the type of unit involved. While each peace operation is different,

Army commanders generally estimate a range of 3 to 6 months to fully restore a unit's war-fighting readiness after a peace operation. This period includes block leave (usually 2 weeks), administrative duties, return and maintenance of equipment, and retraining in combat skills. In addition, a large amount of personnel turbulence can occur during this period, particularly if it is summer. After returning from an operation, personnel often move to other units, change jobs, or attend required training courses at service schools. This turbulence affects the ability of the unit to return to combat ready status. Table 3.1 shows the various phases a unit goes through while returning to combat readiness.

Table 3.1: Phases Involved in a Unit's Return to Combat Readiness

Phase	Time required <sup>a</sup>	Common issues
Initial recovery	1-2 weeks	Equipment accountability, weapon maintenance, administrative responsibilities, and family time.
Block leave	2 weeks	Rest and recuperation.
Maintenance	Light combat arms: 30 days, heavy combat arms and combat support: 3-6 months, combat service support: 2-6 months	Total repair and maintenance of unit equipment. May be delayed by slow return of equipment.
Personnel restructuring	3 months	A very large number of permanent changes of station will occur, changes of position and command at all levels, and many personnel will go to schooling delayed because of the deployment.
Individual training	4-6 weeks	Weapon qualification, renewal of basic military occupational specialty skills, and small unit exercises.
Collective training	All combat arms and some combat support: 8-10 weeks, other combat support and combat service support: 2-4 weeks	Tactical field training, including live-fire exercises and gunnery for heavy units. This training is in preparation for a major combat training center exercise.
Transportation of equipment	1-6 months	Most major items of equipment will arrive within 30-45 days of shipment, but some do take longer.

Source: Center For Army Lessons Learned, Fort Leavenworth, Kansas

<sup>&</sup>lt;sup>a</sup>Many of these phases run concurrently.

The 3-to-6 month recovery period is based on units' rotating or redeploying from a peace operation absent the requirement to reinforce other forces involved in a major regional conflict. Under more urgent conditions, according to DOD, the recovery period would almost certainly be shortened by freezing reassignments, curtailing leave and nonessential temporary duty, and taking other measures. As previously noted, the recovery time for Marine ground combat forces generally has been less because the Marine Corps' participation has been for shorter duration. For all ground combat forces, maneuver and collective skills require the greatest attention once participation in a peace operation is completed.

After participating in the Haiti operation, combat skills for Army ground combat forces were restored in about 3 months. In assessing the condition of their divisions following participation, the Commanders of the 10th Mountain and 25th Infantry Divisions (L), whose units were in Haiti for approximately 4 months, believed that it would take about 3 months for their Divisions to return to combat ready status.<sup>6</sup>

The Commander of the 10th Mountain Division (L) reported the Division as combat ready on May 1, 1995, about 90 days after returning from its 4-month deployment to Haiti. He attributed the relatively quick recovery period in part to the limited deployment time-from September 1994 to January 1995, the high level of readiness beforehand, and the construction of a live fire range in Haiti. Of key battlefield capabilities, fire support and air defense, in particular, required the most training because they were not practiced in Haiti. During the restoration period, the Commander emphasized the need for division and brigade combined arms operations and synchronization of all operating systems. In addition, collective training needed emphasis, with an objective of building up to rigorous brigade-level combat exercises scheduled for October and November 1995 at the Army's JRTC. Although the Division was designated as combat ready, unit commanders have identified key mission essential tasks that still require a training emphasis. In April 1995, for example, both brigade commanders assessed the movement to contact, attack, and defend tasks as requiring additional training.

The 25th Infantry Division (L), which replaced the 10th Mountain Division (L) in Haiti, reported some atrophy in skills not practiced in Haiti such as maneuver (company level and above), combined arms integration, marksmanship, and rapid strategic deployment procedures. Upon

<sup>&</sup>lt;sup>6</sup>The 10th Mountain Division (L) was in Haiti from approximately September 1994 through January 1995. The 25th Infantry Division (L) replaced the 10th Mountain Division in January, and most remained until April 1995.

redeployment, the Division planned to concentrate its training effort on these four skills. Division officials estimated that battalion size units would be combat ready after one 6-week training cycle. Building up to higher level unit readiness would take longer. For example, the Commander of the 2nd Brigade, who returned from Haiti in June 1995, stated that it would take about 3 months for his brigade to be combat-ready. The brigade could have been ready in 1 month if it had been able to focus exclusively on training. However, other obligations, such as assuming guard and other miscellaneous duties, supporting National Guard annual training, attending required schools, and taking leave, meant that the brigade could not train continually. Furthermore, the Division was reorganized, which disrupted the remaining two brigades through downsizing. According to the 2nd Brigade Commander, indirect fire (artillery and mortars) and maneuver integration were the functions most degraded as a result of the Haiti peace operation. Although the brigade attained a combat ready status by the end of August 1995, he estimates that the brigade will be fully trained in all mission essential tasks by November or December 1995.

Aviation Forces Less Affected by Peace Operations, but Combat Skill Restoration Is Still Needed The aviation skills required for war are not substantially different from those required for peace operations. However, the flying conditions are sufficiently different that retraining is required for most aircrew members to restore combat proficiency. In March 1995, we reported that peace operations have resulted in (1) missed training exercises that provide the most realistic combat training; (2) waivers for aircrews who could not complete required training events; and (3) shortages of aircraft at home stations, which limit training opportunities. The Air Force has taken some measures to reduce the stress on their aviation units, but the operational requirements of peace operations still affect their ability to train for more combat-oriented missions.

Aircrews flying extended hours in peace operations sometimes do not get the opportunity to train to the broad range of skills necessary for maintaining combat proficiency. U.S. Air Forces in Europe said that participation in peace operations requires most aircrews to retrain in one or more combat events, such as air-to-air (basic fighter maneuvers, air combat, and low altitude intercepts) or air-to-ground (weapon delivery, surface attack, and terrain following radar at low levels). As a result, it can take up to a month to ready these aircrews for a major conflict. The Air

<sup>&</sup>lt;sup>7</sup>Peace Operations: Heavy Use of Key Capabilities May Affect Response to Regional Conflicts (GAO/NSIAD-95-51, Mar. 8, 1995).

Force believes the erosion of combat proficiency is manageable in the short term by expanding the involvement of other units, particularly from the United States, to allow participating units time to recover sufficiently from an operation.

Due to Operation Deny Flight, F-15E squadrons forward deployed in Aviano, Italy, had to defer much of their normal training in fiscal year 1994. Consequently, as of September 1994, all major war-fighting skills were degraded, and half the pilots had not dropped a practice bomb 2 months into the training cycle. F-15E and F-15C squadrons from Lakenheath, United Kingdom, said that although 4- to 6-week rotations help minimize the erosion of combat proficiency, over the long-term pilots progress more slowly in their training for high-threat scenarios because of periodic deployments to peace operations. They pointed out that postponing or canceling major live-fire exercises, as was done in 1994, exacerbates the problem. Because of Operations Deny Flight and Provide Comfort, the squadrons would need 3 weeks of combat training to be ready for a major conflict. According to Air Force officials at Lakenheath, no major exercise participation had been deferred or canceled in fiscal year 1995.

F-15C, F-16, and A-10 squadrons based in Spangdahlem, Germany, also encountered difficulty in maintaining currency on selected training events as a result of their participation in peace operations. The recovery period for an individual varied from a day or 2, to up to 3 weeks, depending on the length of the peace operation deployment. One A-10 squadron commander estimated a 4-week retraining period would be required to regain full combat readiness. The only EF-111 squadron in the Air Force participated in Operations Deny Flight, Provide Comfort, and Southern Watch. EF-111 crews gained valuable experience during the operations, but they did not get to practice low-level flight, terrain following radar, or emergency procedures. Squadron officials said several sorties would be needed to prepare for combat.

As with the Air Force, representatives of the naval air community said that peace operations interrupt combat training and that patrolling no-fly zones, for example, provides minimum combat training value. Also, quality

<sup>&</sup>lt;sup>8</sup>Operation Deny Flight is a peace operation in support of the U.N. no-fly zone over Bosnia-Herzegovina. The mission of Operation Provide Comfort is to provide safe havens for the population of northern Iraq.

 $<sup>^9\</sup>mathrm{The}$  mission of Operation Southern Watch, a peace operation, is to monitor the repression of the southern Iraq population.

training time is difficult to obtain during peace operations either because of flying restrictions (e.g., no bombing runs or low-altitude flight) or because of the lack of time. These operations have required naval aviation units to compress the time typically devoted to combat training.

Army and Marine Corps helicopter personnel have encountered similar experiences in peace operations as personnel flying fixed-wing aircraft. While they agree that peace operations can erode combat readiness, they stressed that each operation is different in terms of skills used and not used. According to 10th Mountain Division (L) officials, the Somalia operation provided excellent training in helicopter attack, assault, and support skills. The Haitian operation provided more limited experience. For example, attack helicopters in Haiti had a surveillance, force presence, and security role but did not engage in scenarios using more combat-oriented skills. Unlike in combat, they flew high and slowly. At night they used lights. While there were some training opportunities for attack helicopters to practice low level, instrument, and night flying in Haiti, as the mission progressed, assault and lift helicopters were in great demand, and aircrews had little time to engage in more combat-oriented skills. Some Army and Marine Corps helicopter pilots expressed concern that certifications such as flying with night vision goggles could lapse during peace operations. However, they pointed out that recertification could be obtained quickly after returning to home station.

### Naval Training Cycle Disrupted

Peace operations have affected the Navy through lost training opportunities and disrupted training schedules. Forward-deployed Navy and Marine forces are designed so that they can respond rapidly to contingency operations, such as peace operations, as well as to war-fighting requirements. Deployed naval forces regularly participate in Operations Deny Flight and Sharp Guard in Southern Europe and Operation Southern Watch in Southwest Asia. Recent peace operations in the Caribbean, however, required that nondeployed ships and crews be used to meet mission requirements. In these cases, ships and their crews were pulled out of basic training and sent to the Caribbean, generally anywhere from 2 weeks to 3 months, with 1 month being the average. According to the Navy, ships were also pulled off other operations and other ships had to rapidly fill the holes, affecting the entire Atlantic Fleet schedule.

 $<sup>^{10}</sup>$ Basic training lasts approximately 6 months and consists of various aspects such as ship maintenance, independent steaming operations, propulsion examinations, and missile exercises.

According to the Navy, this domino effect disrupted the entire training program. Maintenance and training schedules were accelerated, shifted, or deleted as a result of participating in these operations, creating a bow wave of requirements that will carry through fiscal year 1995 and beyond. For example, the Navy estimated that training for the USS Roosevelt carrier battle group was reduced by 20 percent due to the Caribbean operations. According to the Navy, although priority scheduling and a compressed training period aided the participating ships in attaining predeployment readiness status, the stress of having ships participate in these peace operations at the same time they were to be preparing for their regular 6-month deployments was a factor in the Navy's recent decision to create a special force to handle naval operations in the Western Hemisphere.

Navy officials said it is difficult to quantify the impact of lost or delayed training opportunities on combat readiness since various factors affect how a unit performs during its 6-month deployment. According to naval officials, some ships pulled from basic training have not performed as well as other ships on the Combat Systems Inspection, the Total Ship Survivability Test, and the Operational Propulsion Planning Exam—the final evaluations before moving on to intermediate training. Also, naval officials believe that participation in these operations has been a significant drain on the crews and their families because the time ships spend in port has been reduced. The time spent in the Caribbean and any make-up training have come out of this period.

The Office of the Secretary of Defense, the military services, and DOD research organizations have been cooperating to identify requirements for applying higher technology to operations other than war as well as to combat. DOD agencies and offices have issued several reports¹ that discuss equipment and technology requirements relevant to such operations. The requirements center on three broad classifications: (1) force protection, (2) equipment for military operations in urban areas, and (3) nonlethal² weapons. The Army has conducted much of the research and development toward meeting the requirements and is cooperating with the Marine Corps in studying how to apply new technology to urban warfare. The field is evolving, and to date the new technology has been used in only one peace operation.

### Force Protection Requirements

Because U.S. military vehicles have been vulnerable to land mines and rocket-propelled grenades, the Army has been developing ways for vehicles to provide better protection. An improved armored HUMVEE will help protect Army and Marine Corps personnel against some types of land mines, armored tiles have been tested that can help protect personnel in Bradley Fighting Vehicles from rocket propelled grenades and other munitions, and a new armored security vehicle will enhance the protection of military police. Research and development requirements to improve force protection include methods to locate and neutralize explosives through the use of robotics, unmanned vehicles, air sampling, chemical trace detection, and imaging. Another requirement is better protective armor for individuals against small arms fire or shell fragments.

### Equipment for Military Operations in Urban Areas

An Advanced Research Projects Agency report placed priority on the following requirements to improve the capabilities of U.S. forces for operations other than war, which often occur in urban areas:

 advanced night vision equipment to improve current limitations in spatial orientation, range, weight, and power;

<sup>&</sup>lt;sup>1</sup>A May 1994 Advanced Research Projects Agency report listed 27 technology requirements for operations other than war. A November 1994 Defense Science Board task force report identified required capabilities for military operations in urban areas. And a classified 1995 paper by the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict listed a number of existing and conceptual technologies required for low-intensity conflict.

<sup>&</sup>lt;sup>2</sup>We use the term "nonlethal" because it is the most widely used and accepted term within DOD. As acknowledged in DOD's draft policy on nonlethal weapons, use of such weapons may inadvertently result in fatalities. The Marine Corps prefers to use the term less lethal because it believes the term more accurately reflects the nature of these systems.

- low-signature unmanned aerial vehicles for reconnaissance, intelligence gathering, chemical testing, communications, and deceptions;
- · mission-kill devices to disrupt equipment or weapons;
- invisible soldier technology to avoid detection by sensors or night vision devices;
- reduced visibility aircraft to insert and retrieve troops and equipment in hostile areas; and
- common language voice recognition translator to translate English language voice communications into a foreign language (and the reverse) in real time.

Among the additional desired capabilities—when technology and resources permit—were antimortar, antisniper, stand-off precision breaching, underground facilities destruction, and see-through capability for buildings.

It is likely that future operations at any level of intensity will involve urban areas; thus, the Army and the Marine Corps plan to jointly sponsor a demonstration project (starting in fiscal year 1996) intended in part to show what types of technologies can be applied to military operations in urban areas. There are a number of potential applications of technology to such operations. The Marine Corps, for example, is interested in improving its artillery target acquisition capabilities, perhaps by combining cellular communications technology with global positioning system technology. According to a Marine Corps official, examples of potential applications of technology to military operations in urban areas include

- · reconnaissance, surveillance, and target acquisition;
- situational awareness;
- · communications;
- · navigation;
- · discriminate application of power;
- antisniper;
- · mission planning; and
- combat service support.

### Nonlethal Weapons

Nonlethal weapons are particularly applicable to the lower end of the spectrum of conflict: humanitarian and peace operations. The weapons can be used to discourage, delay, or prevent hostile actions, and they can help prevent or limit the escalation of violence or allow military intervention where lethal force would be undesirable. For example, sticky

or slippery substances can be used to impede the mobility of hostile forces, and nonlethal munitions can be used to control crowds or deal with combatants who are intermingled with civilians. Further, nonlethal weapons can help protect U.S. forces. At the higher end of the spectrum, nonlethal weapons may also be applicable in certain situations to deny an enemy the use of assets without destroying them or to avoid costly reconstruction of infrastructure after the conflict.

#### Army Researching Applications of New Nonlethal Weapons

The Dismounted Battlespace Battle Laboratory at the Army Infantry School, Fort Benning, Georgia, has the key responsibility within the Army for identifying user needs for nonlethal weapons throughout the Army. Because of its familiarity with the use of nonlethal weapons in law enforcement, the Military Police School at Fort McClellan, Alabama, has also played an important role in identifying nonlethal technology. Through a Nonlethal Requirements Working Group, the Army has brought together representatives of the Army Training and Doctrine Command and the Army Materiel Command to plan for the use of nonlethal weapons.

In the near term (1995-97), the Army is researching and developing technologies such as nonpenetrating projectiles, less-than-lethal antipersonnel mines, foams and nets that entangle and immobilize individuals, stun weapons to subdue or immobilize personnel, low-energy lasers to temporarily disrupt vision, and calmative agents to incapacitate personnel. For the long term (1997 and beyond), the Army has identified technology programs to ensnare vehicles with nets and meshes, make traction difficult, disable or destroy engines, prevent the movement of personnel with super adhesives, disorient and confuse personnel with high-intensity pulse lights, and disorient or incapacitate personnel with noise.

Because peace operations usually take place in urban environments and, therefore, involve combatants and noncombatant civilians, technology and equipment requirements are predominantly a ground force issue. The Air Force and the Navy have not been as involved in identifying technology that applies to operations other than war because they operate similarly in peace operations and combat operations. However, the Advanced Research Projects Agency report suggested that technological improvements will be needed to improve force projection capabilities through all-weather, low-cost strategic airlift platforms to rapidly transport multipurpose forces. The aircraft characteristics would include high speed, high payload, long-range, and quick turn-around delivery. The

report also suggests an offshore airlift and sealift capability in terms of a floating logistics base that can be used for uninterrupted sustainment of on-shore operations while minimizing the exposure of personnel and equipment in-theater.

#### Marines Used Nonlethal Weapons in Withdrawal From Somalia

The first use of nonlethal equipment by U.S. forces occurred during Operation United Shield to safely withdraw U.N. forces from Somalia. In planning for the mission, the force Commander was concerned about the potential intermingling of combatants with noncombatants in Somalia, a tactic used by armed militiamen in the past. He decided to use nonlethal weapons to avoid harming unarmed civilians and to keep mobs away from U.S. or U.N. positions and activities.

Marines applied sticky foam, aqueous foam, and road spikes to help protect the forces withdrawing from Somalia. These nonlethal weapons were used as obstacles and barriers to prevent Somalis from coming into direct contact with U.S. and U.N. forces. A number of other such weapons were available had the situation required their use. For example, the Marines brought stinger grenades and a variety of nonlethal munitions, including rubber pellet cartridges, bean bag rounds, foam rubber rounds, and wooden baton rounds. The Marines also had lasers for illumination and targeting purposes.

The Commander obtained approval within the Marine Corps to acquire and provide training on nonlethal systems. DoD authorized the use of selected lower technology nonlethal weapons in Somalia under rules of engagement similar to those for using lethal weapons. Because the nonlethal weapons were not standard and approved systems, Marine Corps officials reported delays in obtaining approval for using the equipment and in receiving the rules of engagement. Some higher technology items were not approved for use because they were not fully developed and tested or because of legal and policy concerns. These items included blinding lasers (which destroy or degrade optics or electronic devices) and several antipersonnel systems such as dazzling lasers, low frequency infrasound, and radio frequency systems.

The Marine Corps formed a team that (1) developed and provided training on nonlethal systems and tactics to a selected battalion and (2) served as advisors in Somalia. One company within the battalion was designated as the primary force to use nonlethal equipment ashore. Marines from this company, however, also carried lethal weapons or lethal ammunition that

could be used in lieu of nonlethal weapons or munitions if the situation required the use of deadly force. In addition, other Marines were armed with lethal weapons to ensure force protection. The unit equipped with nonlethal weapons received about 30 days of training on the equipment.

The Marine Corps learned a number of lessons from its experience with nonlethal technology in Somalia. In responding to our questions on the use on nonlethal equipment, senior I MEF officials who planned and participated in the operation stated that the experience revealed shortcomings in the U.S. capability to identify and deploy military nonlethal systems. Specifically, because a joint task force commander should have a wide range of alternatives to control belligerents, they stated that nonlethal systems need to be developed and acquired in sufficient quantities to deploy with a task force.

In a written response to us, the I MEF Commanding General expressed the need for separate, distinct, and flexible rules of engagement for nonlethal weapons and for training exercises to stress rules of engagement decisions at the tactical level. According to the response, limiting the use of less lethal technologies to the same conditions as deadly force in the rules of engagement caused confusion at all levels during Operation United Shield and was self-defeating. The systems could only be used under the same circumstances as lethal weapons, which would be when the security situation had already become critical. While the Marines made the situation work, it was not how they would have preferred to operate, according to the Commanding General. In responding to a draft of this report, dod took issue with I MEF's position on rules of engagement, stating that there should be one clear, unambiguous set of rules of engagement.

Because nonlethal weapons are new and evolving, neither the Marine Corps nor any other service has doctrine or training standards for their use. Consequently, to ensure the availability of nonlethal equipment and trained personnel for future operations, the officials recognized the need for doctrine, training, and approved nonlethal systems.

The officials also suggested that public information on the military's use of nonlethal weapons needs to convey that nonlethal means will be used to control unarmed crowds and will not substitute for deadly force when it is justified. Also, personnel using nonlethal weapons will always be protected by others armed with lethal weapons. Lastly, the Marines learned how certain equipment is best used, and they pointed out that the

decision to employ nonlethal options needs to be made at the lowest possible level due to the fluidity of situations and short response time.

#### Policy on Nonlethal Weapons Is Being Developed

Nonlethal weapons present unique legal and policy concerns. Because of these concerns, the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict has drafted a policy statement—currently under review—governing the use of nonlethal weapons. The draft policy defines nonlethal weapons and would establish the policy of using them to allow the maximum possible flexibility in the employment of U.S. military forces across the spectrum of conflict. It points out that nonlethal weapons might be used in some circumstances to achieve military or political objectives while minimizing human fatalities and undesired harm to property or the environment. In operations other than war, the draft policy states that nonlethal weapons can be used to discourage, delay, or prevent hostile actions; limit escalation; take military action where intervention is desirable but use of lethal force would be inappropriate; and better protect U.S. forces once deployed. Nonlethal weapons can provide an effective, reversible, or more humanitarian means of denying an enemy the use of human and material assets and may also reduce the postwar economic cost of rebuilding.

The draft policy places responsibility on the military services for developing and acquiring nonlethal weapons and developing doctrine, employment concepts, tactics, training, and logistics support for fielded systems. Priority is to be placed on acquiring the technology to support the following tasks:

- · neutralizing combatants intermingled with noncombatants;
- controlling crowds:
- · disabling or disrupting military logistics;
- disabling or disrupting communication, transportation, and energy infrastructure; and
- incapacitating/immobilizing weapons or weapon development and production processes.

The military services recognize the need to develop doctrine and training programs for this rapidly developing technology. The Army Training and Doctrine Command has drafted a concept paper for nonlethal capabilities in Army operations. It points out that crowd control in conducting peacekeeping and humanitarian operations is as likely a task for the Army as is destroying enemy armor and infantry forces in war. The paper

discusses how the Army will use nonlethal capabilities as a component of "overwhelming, decisive power" in military operations at the strategic, operational, and tactical levels and describes implications for doctrine, training, leadership development, organization, materiel, and support. Types of capabilities needed include those that (1) immobilize, disorient, impair, or disperse people; (2) disable systems; (3) provide security and surveillance; and (4) attack material support systems and infrastructure. The Marine Corps' experience with nonlethal weapons in Somalia underscored the need to ensure the proper use of nonlethal equipment in the future. On the basis of lessons identified from I MEF, the Marine Corps is considering doctrine for the use of nonlethal weapons.

# Agency Comments and Our Evaluation

DOD concurred with a draft of this report but noted that it should include discussions of (1) peace operations training that has been conducted as part of the Partnership for Peace Program and (2) reserve force participation in peace operations. We have revised the report to include information about training provided by recent Partnership for Peace initiatives. We also revised our Objectives, Scope, and Methodology section to state that we did not report on reserve component participation in peace operations because the training provided for these missions was not significantly different than training for standard reserve missions, and, except in a few cases, the number of reserve component forces participating in these operations was relatively small.

DOD took issue with I MEF's view described in our report concerning rules of engagement for the employment of nonlethal weapons, stating that there should be one clear, unambiguous set of rules of engagement. We believe that the difference of views within DOD on this matter underscores the evolving nature of nonlethal technology and the need for DOD to examine this issue further, particularly with regard to the operational use of this technology.

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## Comments From the Department of Defense



#### ASSISTANT SECRETARY OF DEFENSE 2900 DEFENSE PENTAGON WASHINGTON, D.C. 20301-2900



1 2 SEP 1995

Mr. Richard Davis
Director, National Security Analysis
National Security and International
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441 G. Street, N.W.
Washington, DC 20548

Dear Mr. Davis:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "PEACE OPERATIONS: Effect of Training, Equipment, and Other Factors on Unit Capability," dated August 23, 1995 (GAO Code 701054), OSD Case 1005.

The Department concurs with the report, with comment. Technical corrections were provided separately to the GAO staff.

The Department appreciates the GAO effort to catalogue many of the significant efforts undertaken by the Military Departments to improve the DoD capability to conduct peace operations. Nonetheless, there is one significant example of a major recent development that should be highlighted. The Partnership for Peace (PfP) program utilizes peace operations training as a venue for military-to-military contact events. Recently, there were two events of this nature. ELOQUENT NUGGET was a three week seminar sponsored by the Joint Staff that discussed Combined Joint Task Forces for peacekeeping. In addition to U.S. military personnel, other participants included representatives of the Ministries of Defense and General Staffs of many partner countries. COOPERATIVE NUGGET was a large peace operations field exercise conducted at the Joint Readiness Training Center, in which several PfP countries participated. While both events were primarily intended to advance the partnership program, U.S. planners and forces also received substantial peace operations training and interoperability benefits.

Another topic area deserves mention as well. Though the report highlights important issues and effects of peace operations on active forces, it does not consider the linkage between active and reserve forces nor that the training and readiness impacts of peace operations may be dramatically different on the Reserve Component



Appendix I
Comments From the Department of Defense

(RC). Possibly, a normally part-time force that is placed on active duty for a peace operation might increase its overall training readiness. Further, there are broad and complex issues associated with the equipping and the evaluation of training of the RC for peace operations. The Department continues to seek innovative solutions to these challenges. The report does not address these areas of inquiry.

Finally, the Department acknowledges the concerns expressed in the report on adapting Rules of Engagement (ROE) for employment of non-lethal weapons. Still, we believe the use of non-lethal weapons does not require separate ROE. In fact, it is a difficult task to train a soldier to standards on one set of ROE. We should not ask our troops to carry multiple variations based on their weapons load. Since many of these operations are performed in coalitions, it's even more important to define one clear, unambiguous set of ROE for use by all parties.

The Department appreciates the opportunity to comment on the draft report.

Edward L. Warner, III

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